

# Mechanical Department Report

## Board of Directors Meeting: July 8, 2022

### DS ELEMS

We've had a lot going on around the museum this last month or so. Work on WP165 and steaming up on July 2 and 3 will likely be the highlight. We picked up a new boxcar for the Archives department which is currently undergoing some work.

As with most things these last couple of years, discovering new and exciting issues while doing restoration or repair work and then dealing with the hassle of ordering and waiting for parts has put a damper on the intended work schedule, as has the need to put time in on the daily upkeep of the museum with a minimum of personnel. Hopefully that's behind us for the time being, all the parts we need to finish up the current work on SP2873 are on hand, and barring any new museum projects we should be able to complete those particular repairs by the end of the month.

We'll also begin prepping the shop for some major work towards the end of the operating season. Namely, the replacement of the two east end roll-up doors sometime in September. This will involve cleaning up the east end of the shop, and in conjunction with this cleanup and shop repair we also plan to rearrange some of the equipment on display in the east end.

In terms of progress since the last Board Meeting most work in the shop has been on WP 165 dealing with all the little issues that crop up when operating a steam locomotive as well as the final ends and outs of the restoration work. However, during this last week running up to the July 4 weekend, the members of the Steam Crew pitched in to work on a variety of other projects. These included the redecking of WPMW 1132 (stem fuel storage tank car) and repairs to the ballast tamper which is now back in service. A huge thanks to Channing Walker and Mike Waters for the work on 1132, and also to Roger Stabler and Hank Stiles for work on the ballast tamper.

### Forklifts

I plan to get the issue with the steering ram on the Yale taken care of later this summer. Like the white lift it needs some minor engine work but the primary issue keeping it out of service at the moment is the leaking steering ram which causes control issues in addition leaving a mess everywhere it's driven. Once the Yale is determined to be in satisfactory condition we'll be pulling Big White (the LiftAll) from service for some long overdue work to the engine, drivetrain and suspension.

### Locomotives

QRR1100 and WP1503 are currently operating adequately, though have their fair share of intermittent issues. I replaced the gauge for the main reservoir/equalizing reservoir on June 30. 1503 had a series of electrical issues that cropped up one after another but we seem to have gotten them sorted out and haven't had any new issues in the last here weeks.

SP2873 should be in the waning stages of actual component work, with the last of the parts for the water pump rebuild showing up mid to late June. Unfortunately there have been a lot of other activities taking our time away from the various mechanical projects but these we should be good to get back on track this month. Once I get a water pump rebuilt and installed, we can hook the rest of the cooling system back up and carry on with the Annual Inspection work, and eventually place 2873 in service.

## Upcoming Mechanical Work

I'm putting the work on Big White (LiftAll) off until the fall. There are several things coming up in September that I'll be working on getting the shop ready for, namely the replacement of the east end roll-up doors. Currently my planned line-up for locomotive work is as follows:

- SP2873: Rebuild left-bank water pump, remaining work items to complete annual inspection requirements. Radiator work may take place later in the season as other shop work is wrapped up.
- QRR1100: Annual Inspection is planned for September. Other miscellaneous work as required during time in shop.
- WP707: Injector work in conjunction with annual inspection. Replace missing shutter pistons.
- WP2001: Radiator work. Replace oil filters. Annual inspection.

As for our "rubber tire fleet," work is plentiful:

- Case 580C: Left inner transaxle seal leaks, parts are readily available but the required work will necessitate some planning and organization; it is possible that the entire rear end may need to be dropped. One of the bucket lift rams needs to be resealed or replaced, it leaks so long as the hydraulic system is pressurized (engine running and pump operating).
- Kludge/tug: May need a new battery. Engine turns over but doesn't start.
- LiftAll forklift (Big White): Needs engine work, top end rebuild at a minimum. Needs new suspension springs.
- Yale forklift: Needs a new steering cylinder, possible work to steering motor. Needs some engine work, diesels and backfires on shutdown.